We are committed to—

WORKING WITH PARTNERS TO IMPROVE HEALTH IN THE U.S. AND GLOBALLY

The National Immunization Program (NIP) works closely with both established and new global partners to provide immunization expertise to strengthen and expand global childhood immunization programs. We are committed to making polio eradication a reality, to pursuing efforts to eliminate or better control measles and rubella, and to helping developing countries effectively utilize vaccines to control and prevent vaccine-preventable diseases.

In 2002, CDC changed the name of the former Vaccine-Preventable Disease Eradication Division to the Global Immunization Division in recognition of CDC's intensified work in a broad range of immunization activities.

GLOBAL ALLIANCES

PREVENTING DISEASE AROUND THE GLOBE

For most vaccine-preventable diseases, no country is ever truly free of a disease until all countries are free. Working together, the countries of the world have wiped smallpox off the face of the earth. It is hoped that polio will go the same route by 2005, and that one day measles will also be eradicated. The CDC continues to play a leadership role in collaborating with global partners to help protect every person in every country from vaccine-preventable diseases.

STRENGTHENING ROUTINE IMMUNIZATION SERVICES

Approximately 2.5 million people die each year as a result of diseases that could have been prevented with currently available vaccines. Vaccines that are now in the late stages of development or have been recently introduced in industrialized countries, such as the pneumococcal conjugate vaccine, could prevent almost two million additional deaths. CDC is therefore committed to improving access to sustainable and safe immunization services. Together with international partners, we are working to strengthen routine immunization activities, to reduce illness and death caused by vaccine preventable diseases, and to build a strong platform for the introduction of new vaccines in the developing world. In 2002, CDC joined with international partners in projects at the country and regional levels to provide technical assistance to strengthen immunization programs, to improve health information systems and use of data, and to promote alignment with polio eradication and measles mortality reduction strategies.

SUPPORTING THE GLOBAL ALLIANCE FOR VACCINES AND IMMUNIZATIONS

The Centers for Disease Control and Prevention is also working closely with the Global Alliance for Vaccines and Immunization (GAVI). This network of international partners was established to help the poorest countries strengthen childhood immunization programs, introduce new and underutilized vaccines, improve injection safety in immunization programs, and fund research into the development of new vaccines. Through the generosity of partners such as the Bill and Melinda Gates Foundation, the vaccine fund is currently capitalized at more than $1.2 billion, with more than 60 countries currently receiving GAVI funding support.

For the past two years CDC has served as the technical institute representative on the GAVI Board, and NIP staff continue to play an active role on GAVI Task Forces. In this venue, the NIP has provided technical support at the global, regional, sub-regional, and country levels in the implementation and evaluation of GAVI-related activities. Other partners include the World Health Organization (WHO), United Nations Children's Fund (UNICEF), the World Bank Group, the International Federation of Pharmaceutical Manufacturers Association, other public health and research institutions, and national governments.

THE GAVI MISSION:

- To help provide vaccines to the 30 million unimmunized children around the world
- To bring vaccines to children in developing countries
- To encourage and support the development of vaccines to help fight the diseases most preventable in poorer countries

In 2002, working with other centers at CDC, NIP developed and published the strategic document, *Global Immunization, 2002–2006: An Overarching Strategy for CDC*. This document complements the current CDC Global Health Strategy document, *Working with Partners to Improve Global Health: A Strategy for CDC and ATSDR* (produced in September 2000) by providing specific information on how CDC proposes to pursue its global health strategy in the area of global immunization.

Polio Eradication Efforts

The global polio eradication efforts have accomplished much success. Of the three types of wild polioviruses, type 2 was last seen in 1999 and appears to have been eradicated. Today, more than 200 countries and territories are polio-free, and the disease is now indigenous to seven countries in South Asia and in Africa. For the year 2002, there were only 1,729 (provisional data as of January 7, 2003) confirmed cases of paralytic polio reported to WHO—a decline of more than 99 percent since the global initiative was launched in 1988. Many challenges remain, however, as we strive to achieve and certify the eradication of polio.

Significant Achievements *in Polio Eradication*

Vaccine Delivery

During 2002, CDC contributed 650 million doses of oral polio vaccine (OPV) through UNICEF to eradicate polio.

National Immunization Days

Every country with endemic or recently endemic polio conducts National Immunization Days (NIDs). During these activities, every child younger than five years of age receives two doses of oral polio vaccine, one month apart, regardless of their prior immunization status. In 2001, 575 million children in 94 countries were reached as part of these efforts. At that time, two billion doses of OPV were delivered in the more than 300 immunization rounds.

Stop Transmission of Polio (STOP) Teams

Professionals with experience in epidemiology and surveillance are being sent to polio-endemic countries to help with surveillance as well as the planning and evaluation of NIDs. Since January 1999, 386 STOP team members have participated in 3-month assignments in 34 different countries. This initiative has significantly enhanced and boosted each host nation's Expanded Programme on Immunization.

Surveillance

The Centers for Disease Control and Prevention and the Global Polio Eradication Initiative partners have intensified activities to develop active surveillance for acute flaccid paralysis (rapid onset of floppy paralysis of arms and legs) and polio in India, Bangladesh, Pakistan, Afghanistan, Nigeria, Ethiopia, Angola, and other countries in Asia and Africa.

Laboratory Support

The Centers for Disease Control and Prevention assists WHO in building global polio and measles laboratory networks, and serves as a WHO Global Specialized Reference Laboratory for polio. Reference laboratories are highly qualified laboratories that receive specimens from other laboratories for confirmation and also provide assistance with difficult specimens. To date, there are 147 laboratories in the global polio network.

Partnerships

Collaboration among international partners continues to expand. This collaboration is unique among public health initiatives in its unprecedented level of joint activity, scale of private sector contributions, and funds raised. Rotary International alone projects a contribution of more than $500 million (U.S. dollars) by 2005. The partners include

- CDC
- Rotary International
- UNICEF
- WHO
- US Agency for International Development
- Japan
- Great Britain
- Germany
- Canada
- Denmark
- Australia
- The Netherlands
- Task Force for Child Survival and Development
- United Nations Foundation
- Bill and Melinda Gates Foundation
- World Bank
- International Federation of Red Cross and Red Crescent Societies
- Aventis Pasteur/IFPMA
- Other international agencies

Future and Continuing Activities *in Polio Eradication*

- ***Continue to accelerate immunization activities and intensify surveillance in all polio-endemic countries***, particularly those affected by war or civil unrest.
- ***Support coordinated, planned strategies*** for polio eradication based on strong routine immunization programs, National Immunization Days, acute flaccid paralysis surveillance, and "mopping-up" immunization.
- ***Continue the STOP Program*** so a cadre of trained public health professionals can work in high-priority countries to accelerate polio eradication, accelerate measles mortality reduction and regional elimination, and improve data management.
- ***Continue research and develop consensus on post-eradication immunization policy***, as well as support for laboratory containment of the virus.
- ***Continue the certification process*** for countries that are polio-free, but not yet certified.
- ***Seek additional financial and human resources*** to fully implement the WHO-recommended strategies for polio eradication in Africa and Asia.

Success Story

POLIO

Three WHO Regions Now Polio-Free

In 1988, the World Health Assembly resolved to eradicate polio throughout the world. Since that time, extraordinary success has been made. In 1988, there were an estimated 350,000 cases of polio in 125 countries around the globe. As of 2002, three WHO regions (Americas, European, and Western Pacific) were certified as polio-free. These regions have a total population of more than three billion people and comprise 134 countries, territories, and areas. Only seven countries report ongoing polio transmission in 2002, with 99 percent of all cases in just three countries—India, Nigeria, and Pakistan (provisional data).

Measles Mortality Reduction and Regional Elimination Efforts

Measles is no longer endemic in the United States. This means that all of the cases now seen in our country were either documented or believed to have been brought in from other countries. The number of cases in the Western Hemisphere has been reduced by more than 99 percent from approximately 250,000 cases in 1990 to 2,548 cases in 2002 (provisional data). And measles importations in the United States from Latin America have also dropped—from 230 imported cases in 1990 to zero during 2000–2002 (provisional data).

However, the disease remains rampant in other parts of the world. In 2000, measles was responsible for an estimated 770,000 deaths in developing countries, and it was the leading cause of vaccine-preventable death for children under 5 years of age. The Centers for Disease Control and Prevention, in partnership with the Pan American Health Organization (PAHO), WHO, and UNICEF, agrees that there is an urgent need to accelerate global measles control.

Significant Achievements *in Measles Mortality Reduction and Regional Elimination*

Partnership

The Centers for Disease Control and Prevention has played a leading role in establishing a new partnership, which is championing measles control efforts to prevent the 770,000 annual measles deaths still occurring worldwide. The partnership also includes WHO, UNICEF, American Red Cross, the UN Foundation, and the International Federation of the Red Cross and Red Crescent Societies. As of January 2003, the partnership has immunized over 20 million children and prevented and estimated 140,000 deaths in Africa.

Support

During 2002, CDC supported measles mortality reduction in the African Region (Kenya, Tanzania, Ghana, Benin, Burkina Faso, Mali, Cameroon, Mozambique, Uganda, and Zambia) and the Western Pacific Region (Cambodia). In addition, CDC supported regional measles elimination activities in the Region of the Americas (Venezuela, Colombia, and Paraguay) and the European Region (Moldova).

Strategies

A three-pronged strategy has been responsible for many successes in global measles reduction, such as the dramatic drop in measles cases in the Western Hemisphere and the elimination of endemic measles in the U.S.

1. Supplementary immunization activities to rapidly increase population immunity against measles (a "second opportunity" for measles immunization).
2. High routine coverage with at least one dose of measles vaccine
3. Integrated epidemiologic and laboratory surveillance

Accomplishments

- During 2002, there were only 2,572 confirmed measles cases in the Western Hemisphere. The majority of these cases occurred in Venezuela and Colombia, while the remaining cases were imported from measles-endemic countries outside the Western Hemisphere.
- In fiscal year 2002, CDC contributed approximately $28 million in grants and other scientific and technical assistance to control measles globally.

Future and Continuing Activities
in Measles Mortality Reduction and Regional Elimination

- ***Support accelerated measles control in Africa*** by focusing on ten priority countries: Burkina Faso, Mali, Tanzania, Zambia, Cameroon, Kenya, Mozambique, Ghana, Benin, and Uganda.
- ***Eliminate measles in the Western Hemisphere***, in cooperation with PAHO, by strengthening surveillance, outbreak investigation and response, routine immunization and implementation of vaccination strategies, and epidemiological and laboratory capabilities.
- ***Implement the Global Measles Strategic Plan (2001–2005)*** with partners for measles-related mortality reduction and regional elimination of the disease.
- ***Build epidemiologic and laboratory surveillance capability.***
- ***Evaluate vaccination strategies*** for elimination, mortality reduction, and accelerated control.
- ***Promote injection safety and development of new injection tools.***
- ***Increase the capacity of Ministries of Health*** to evaluate supplementary immunization campaigns.
- ***Conduct research*** to determine the impact of the HIV pandemic on measles control and to facilitate the development of high-speed, needle-free injection devices.

Success Story

MEASLES

Spearheading Partner in Measles Initiative

Centers for Disease Control and Prevention, American Red Cross, and United Nations Foundation are all founding members of the Measles Initiative. This represents a long-term commitment to control measles deaths in Africa by vaccinating 200 million children, an effort which is expected to prevent approximately 1.2 million deaths over a five-year period. The Measles Initiative supported the largest measles immunization campaign in Africa in 2002—approximately 13.3 million children were vaccinated in Kenya, which prevented an estimated 18,000 measles deaths. Other key partners in the initiative include UNICEF, WHO, the International Federation of Red Cross and Red Crescent Societies, and countries affected by measles.